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**NEW MONITORING TECHNIQUES FOR IMPROVING THE EDUCATIONAL
ACTIVITY**

Razvan DINA, Bogdan Cristian ONETE, Doru Alexandru PLESEA, Remus NEGOI

The Bucharest Academy of Economic Studies

E-mail: rdina@ase.ro, onete@ase.ro, pleseadoru@gmail.com, remusnegoi@yahoo.com

Abstract: *Education is a complex system embedded in a political, cultural and economic context, but Internet breaks all the barriers making information to enter everywhere, to everyone, so quality of educational activity will be improved. Teaching methods and ways of interaction between student and teacher have undergone a profound transformation with the increasing use of information technology. The teacher must change their work instructions, methods, or tools in order to decrease the rate of failure and increase the quality of education. The frequent use of various forms of teaching -learning software, presentation and methods of e-learning - felt the need for better monitoring of student activity, and thus arose a series of computer methods for monitoring and evaluation of the activity of students. Concepts used by Web 2.0 have radically changed the philosophy of Internet communication by integrating innovative methods and tools. Applications such as Wiki, Glossary, Web Calendar, Blog, Forum, Chat, etc., led to substantial improvement of teaching quality, making them indispensable for achieving a modern and efficient teaching process, making them common tools in teaching process. Besides ease of communication, them offer and trace route of work made by each student, providing a mirror of the evolution of each student, in this way this instruments can become a method of evaluation. In this work, based on theoretical concepts we try to determine how could be implemented these methods and how they are perceived among students. For this we made a research applied to students enrolled in an online master program at ASE Bucharest.*

Keywords: *monitoring techniques, quality, educational activity, educational environment, social media*

I. TECHNIQUES FOR IMPROVING THE EDUCATIONAL ACTIVITY

Growing Internet usage and technology applications represent a revolutionary driving force, with an amazing evolution during the last period of time, with significant importance to the business environment. The virtual space has the highest degree of globalization, as space and distance become totally irrelevant.[7]. The expansion of Internet based learning was determined by the dynamics of the new economy and its potential for more efficient education. That is because the electronic environment of learning may be customized and adapted for individual users without involving high expenses, facilitating thus the transfer of information and knowledge. Through this system the direct approach and distance education must be combined using audio-visual methods. Thus, a different, new approach should be taken into account, as e-learning involves a different dynamics of the teaching and learning processes through multimedia content.

However, the E-learning system is not the perfect learning system as it has also vulnerabilities, and these refer mainly to the lack of face to face group interaction, unsuited platforms for communication and the deficiency in correlating the tools and methods of teaching with the real needs of the users [1].

It is true that the computer-based training has much evolved from the initial concept of training stages delivered as packages of electronic books. In the market are now plenty of e-learning

solutions that help creating a course and give distance learning program management tools to institutions [1]. The trend is clearly going towards an interactive and involving way of teaching, adding human support and interaction between students and teachers through instant messaging technology, forums, synchronous content delivery and online tutors or e-trainers. In addition, more supporting material is available by indicating on web's extraordinary rich amount of informational resources where the needed information can be found.

1.1. Monitoring and evaluating learning process

Many people consider that monitoring and evaluation are activities of a same process, but in fact two distinct sets of activities, related but not identical. Monitoring is the systematic collection, analysis and use of information, instead evaluation is the comparison of the present state of facts against a previous state of facts. If is done properly, monitoring, it is an invaluable tool for teacher, and it provides a useful base for evaluation. Evaluation can be formative (taking place during the life of teaching activities, with the intention of improving teaching and accumulation of knowledge). It can also be summative (the knowledge gained by students and drawing learning from a completed teaching process).

What monitoring and evaluation have in common is that they are geared towards learning, and teachers must focusing on :

- i. Efficiency
- ii. Effectiveness
- iii. Impact

Efficiency tells teachers if the knowledge delivered in teaching process appropriate in terms of the output desired.

Effectiveness is the measure to which a learning process achieves the specific objectives were established.

Impact determine whether teaching methods have achieved their intended purpose, how the instruments used reached their goal.

Information used in monitoring and evaluation could be :

- ~ quantitative
- ~ qualitative.

Quantitative measurement can be expressed in absolute numbers, as a percentage or it can be expressed as a ratio. Those may be established by counting or measuring.

Qualitative measurement tells you how people feel about a situation or about how things, and are gathered by asking, observing, interpreting.

Quantitative measurement give to the teachers measurable information (number of students, grades, etc), but qualitative gives thoughts, perceptions and others. Qualitative information could be taken by asking, observing or interpreting facts. For a good process of monitoring and evaluation it is required a combination of quantitative and qualitative information in order to be comprehensive.

Social media provide a variety of instruments which could be used in monitoring and evaluation of the leaning process.

1.2. Social media a useful tool in teaching process

Web 2.0 and social software tools are enabling an unprecedented opportunity to enact the fundamental principles of social constructivism and distributed cognition. [2] The Virtual Learning Environment (VLE) as the single learning space, with Web 2.0 integrated tools , can encourage collaborative learning. [5].

Social media applications provide to the teachers many opportunities in making lessons more attractive easy to understand. In the same time these could be useful in the process of evaluation. They can track the activity students can see how many times they used a certain resource, how many students take part in a discussion on forums, watched a movie posted on YouTube and many others. These could be considered quantitative information. Also teachers can follow the discussion on forums or chats thus being able to evaluate can evaluate the level of knowledge accumulated by students, they can evaluate the quality of comments from their blogs, etc. These could be considered qualitative information.

Maybe this is the reason why E-learning platforms has integrated many types of social media tools like Wiki, Glossary, Web Calendar, Blog, Forum, Chat.

II. RESEARCH ABOUT PERCEPTION OF ACCESSIBILITY AND QUALITY OF LEARNING ACTIVITY

We made a questionnaire about perception of students regarding accessibility and quality of learning activity on E-learning platform of The Bucharest Academy of Economic Studies. This questionnaire was applied to a number of 150 students. The distribution by age is done thus: 11 percents has more than 35 years old, 11 percents has between 31 and 35 years old, 13.5 percents has between 26 and 30 years old and 64.5 percents has less 25 years old. Distribution by gender is : 60 percents of the respondents was female and 40 percents was man.

2.1. A general view about quality of E-learning activity



Figure 1. Perception about quality of E-learning activity

In our questionnaire we asked the students to give a mark between 1 and 5, where 1 is minimum and 5 is maximum, about how they perceive about quality of activity on our E-learnig platform. As is seen in Figure 1, students have a good impression about all activities performed on the platform. The average of the marks about accumulation of knowledge is the highest, which proves that using the E-learning platforms lead to improvement of teaching process. Interaction with colleagues and teachers is slightly above average, which proves that our platform is not good enough used by the parties involved. The evaluation mode has a good score, above average , but we expected to be close of 5. We think that students do not understand enough evaluation methods, or some of them do not believes that this is the best method of evaluation., they might have better results in offline medium.

2.2. Efficiency of E-learning activity

We asked the students how much time spent on the platform to solve their assignments, read the courses, chat and discuss on forums. In Figure 2 it can be seen distribution of the answers. Our students do not spend a long time on the platform, the majority of them answered that they spend enough time , which show that they use efficient all tools provided by the online medium. Correlating with the answers of the precedent question we think that they just solve their assignments, but do not interact enough with colleagues and teachers. Just some of them answered that they spend long and too long time on platform, this proves that online medium is not yet enough used.

Time spent on the platform

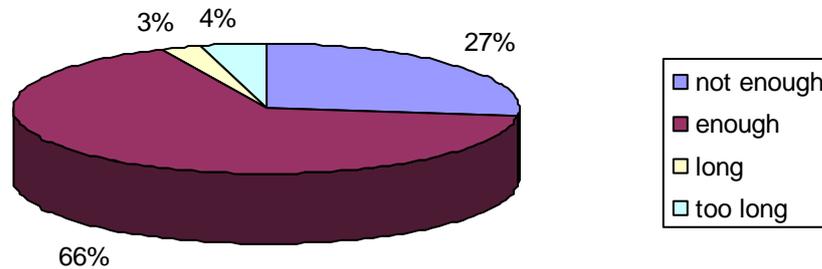


Figure 2. Time spent on the platform

2.3. The image about quality of learning process

Another question was how satisfied are about quality of learning process. Most of the students indecisive, they are nor satisfied, nor satisfied. But a good part of them (34 %,) are satisfied by the learning process held in online medium, as we notice in Figure 3. Based on this results we consider that the students not appreciate at the true value potential offered by the platform.

Satisfaction about quality of learning process

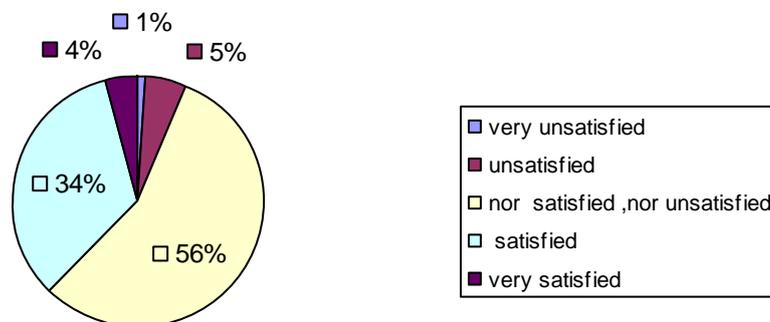


Figure 3. Satisfaction about quality of learning process

2.4. Students perception on ease of use the platform

Another point of view which we wanted to find was about students perception on ease of use the platform to solve learning activity. E-learning platform of The Bucharest Academy of Economic Studies is developed on Moodle, which is designed to help educators create online courses with opportunities for rich interaction. Moodle dominates the evaluation by achieving the best value five times. Additional strengths of Moodle are the comprehensive didactical concepts and also the tracking of data. [4] In Figure 4 can be seen that students feel comfortable on the platform, most of them believe that platform used in their learning process in easy to use.

Perception on ease of use the platform

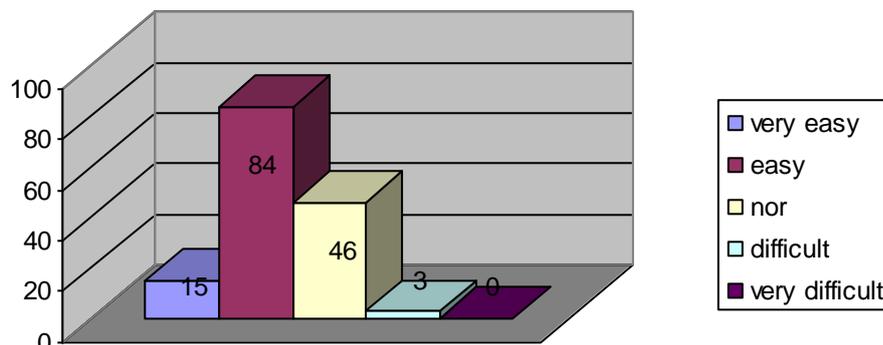


Figure 4. Perception on ease of platform use

III. SOLUTION FOR A BETTER EVALUATION OF STUDENTS

Essentially, bringing quality in creating and developing a successful e-learning platform means to focus continuously on meeting the requirements of the individual users, to define the key processes of the e-learning system to set clear goals and to measure them. The organization should always try to pleasantly surprise the learners when using the e-learning tools, not forgetting its main purpose: to maximize the transfer of knowledge towards the students. [2]

Integrating any (new or old) technologies into education requires a pedagogy that is effective in information exchange, yet flexible enough to respond to the various demands placed upon learning and teaching by both the learner, and the technology. [5]

Communication tools offered by social media elements like forum, chat and others could ease the teacher work, not only in teaching process but also in process of monitoring and evaluate the students. Social media could be an excellent platform who has many tools for allowing learners to clarify concepts, establish meaningful links and relationships, and test their mental models. Furthermore, they provide a public forum in witch the cumulative process of concept formation, refinement application and revision is fully visible to student peers and teacher. [6]

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